SCHWEGMAN ■ LUNDBERG ■ WOESSNER ■ KLUTH

United States Patent Application COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; that

I verily believe I am the original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled: <u>MULTICARRIER RECEIVERS AND METHODS FOR SEPARATING TRANSMITTED SIGNALS IN A MULTIPLE ANTENNA SYSTEM.</u>

The specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 C.F.R. § 1.56 (attached hereto). I also acknowledge my duty to disclose all information known to be material to patentability which became available between a filing date of a prior application and the national or PCT international filing date in the event this is a Continuation-In-Part application in accordance with 37 C.F.R. § 1.63(e).

I hereby claim foreign priority benefits under 35 U.S.C. §119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on the basis of which priority is claimed:

No such claim for priority is being made at this time.

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

Application Number

Filing Date
January 12, 2004

60/536071

I hereby claim the benefit under 35 U.S.C. § 120 or 365(c) of any United States and PCT international application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. § 1.56(a) which became available between the filing date of the prior application and the national or PCT international filing date of this application:

No such claim for priority is being made at this time.

Serial No. not assigned Fiting Date: not assigned

I hereby appoint the following attorney(s) and/or patent agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith:

. Aldous, Alan	Pag No 31 005	Complete Bullion A	.		
Anderson, Robert D.	Reg. No. 31,905	Greenberg, Robert A.	Reg. No. 44,133	Perdok, Monique M.	Reg. No. 42,989
Anglin, J. Michael	Reg. No. 33,826	Greenwald, Bradley A.	Reg. No. 34,341	Peret, Andrew R.	Reg. No. 41,246
~ /	Reg. No. 24,916	Harris, Robert J.	Reg. No. 37,346	Peterson, David C.	Reg. No. 47,857
Arora, Suneci	Reg. No. 42,267	Hope, Libby	Reg. No. 46,774	Plimier, Michael D.	Reg. No. 43,004
Bacon, Shireen	Reg. No. 40,494	Huter, Jeffrey B.	Reg. No. 41,086	Price, Lucinda G.	Reg. No. 42,270
Barre, Michael	Reg. No. 44,023	Jackson Huebsch, Katharine A.	Reg. No. 47,670	Proksch, Michael A.	Reg. No. 43,021
Beale, Jay P.	Reg. No. 50,901	Jordan, B. D.	Reg. No. 43,698	Prout, William F.	Reg. No. 33,995
Beekman, Marvin L.	Reg. No. 38,377	Jurkovich, Patti J.	Reg. No. 44,813	Reif, Kevin A.	Reg. No. 36,381
Bianchi, Timothy E.	Reg. No. 39,610	Kalis, Janal M.	Reg. No. 37,650	Sayles, Crystal D.	Reg. No. 44,318
Billion, Richard E.	Reg. No. 32,836	Kalson, Seth	Reg. No. 40,670	Schurnm, Sherry W.	Reg. No. 39,422
Black, David W.	Reg. No. 42,331	Klima-Silberg, Catherine 1.	Reg. No. 40,052	Schwegman, Micheal L.	Reg. No. 25:816
Bohanek, Bob	Reg. No. 52,627	Kluth, Daniel J.	Reg. No. 32,146	Scott, Russell	Reg. No. 43,103
Brake, Edward	Reg. No. 37,784	Lacy, Rodney L.	Reg. No. 41,136	Seddon, Ken	Reg. No. 43,105
Brennan, Thomas F.	Reg. No. 35,075	Lam, Peter	Reg. No. 44,855	Sceley, Mark	Reg. No. 32,299
Burge, Ben	Reg. No. 42,372	Lin, Issac	Reg. No. 50,672	Shah, Arni P.	
Chadwick, Robin A.	Reg. No. 36,477	Lundberg, Steven W.	Reg. No. 30,568	Simon, David	P.eg. No. 42,143
Chen, George	Reg. No. 50,807	Maki, Peter C.	Reg. No. 42,832	Skabrat. Steve	Reg. No. 32,756
Choi, Glen	Reg. No. 43,546	Malen, Peter L.	Reg. No. 44,894	Speigr, Gary J.	Reg. No. 36,279
Clark, Barbara J.	Reg. No. 38,107	Martinez, Anthony	Reg. No. 44,223	Steffey, Charles E.	Reg. No. 45,458
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Crawford, Ted A.	Reg. No. 50,610	Mehrle, Joseph P.	Reg. No. 45,535	Tong, Viet V. Tran, David	Reg. No. 45,416
Dahl, John M.	Reg. No. 44,639	Monnomeier, Larry	Reg. No. 51,003	•	Reg. No. 50,804
DeLizio, Andrew	Reg. No. 52,806	Muller, Mark V.	Reg. No. 37,509	Travis, John F.	Reg. No. 43,203
Diehl, Robert	Reg. No. 40,992	Nagy, Paul	Reg. No. 37,896	Tweet, Kerry D.	Reg. No. 45,959
Draeger, Jeffrey S.	Reg. No. 41,000	Nelson, A. James		Wawrzyn, Robert	Reg. No. 54,654
Drake, Eduardo E.	Reg. No. 40,594	Nesheiwat, Michael J.	Reg. No. 28,650	Wells, Calvin	Reg. No. 43,256
Embrerson, Janet E.	Reg. No. 39,665	Newtson, Ruth H.	Reg. No. 47,819	Whittington, Stuart	Reg. No. 45,215
Faatz, Cindy	Reg. No. 39,973	Nicholls, Dennis A.	Reg. No. 26,657	Willardson, Michael	Reg. No. 50,856
Forrest, Bradley A.	Reg. No. 30,837	Niclsen, Walter W.	Reg. No. 42,036	Winkle, Robert G.	Reg. No. 37,474
Gagne, Christopher	Reg. No. 36,142		Reg. No. 25,539	Wisor, Rita	Reg. No. 41,382
Garrett, John R.	Reg. No. 27,888	Padys, Damy J.	Reg. No. 35,635	Woessner, Warren D.	Reg. No. 30,440
Gorrie, Gregory J.		Parker, Lanny	Reg. No. 44,281	Wong, Sharon	Reg. No. 37,760
Greaves, John N.	Reg. No. 36,530	Parker, J. K.	Reg. No. 33,024	Yates, Steven D.	Reg. No. 42,242
Green, Sharmini N.	Reg. No. 40,362	Peacock, Gregg A.	Reg. No. 45,001		•
Cross, Similari 14.	Reg. No. 41,410	Pedersen-Giles, Alan	Reg. No. 39,996		

I hereby authorize them to act and rely on instructions from and communicate directly with the person/assignee/attorney/firm/organization/who/which first sends/sent this case to them and by whom/which I hereby declare that I have consented after full disclosure to be represented unless/until I instruct Schwegman, Lundberg, Woessner & Kluth, P.A. to the contrary.

Please direct all correspondence in this case to Schwegman, Lundberg, Woessner & Kluth, P.A. at the address indicated below:

P.O. Box 2938, Minneapolis, MN 55402

Telephone No. (612)373-6900

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of joint inventor number 1:

Sumeet Sandhu

Citizenship:

United States of America

Residence: San Jose, CA

Post Office Address:

25 Rio Robles East #408

San Jose, CA 95134

Signature: Surneet Sandhu

Date: 3/29/09

Attorney Docket No.: 884.B51U\$1 Serial No. not assigned Filing Date: not assigned

Page 3 of 5

 \underline{X} Additional inventors are being named on separately numbered sheets, attached hereto.

Full Name of joint inventor in Citizenship: Post Office Address:	number 2: <u>Lei Shao</u> China 5038 18th Ave. NE Seattle, WA 98105	Residence: Seattle, WA		
Signature: Lei Shao		Date:		

§ 1.56 Duty to disclose information material to patentability.

- (a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:
 - (1) prior art cited in search reports of a foreign patent office in a counterpart application, and
 - (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.
- (b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and
 - (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
 - (2) It refutes, or is inconsistent with, a position the applicant takes in:
 - (i) Opposing an argument of unpatentability relied on by the Office, or
 - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

- (c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:
 - (1) Each inventor named in the application:
 - (2) Each attorney or agent who prepares or prosecutes the application; and
 - (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.
- (d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.

United States Patent Application COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; that

I verily believe I am the original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled: MULTICARRIER RECEIVERS AND METHODS FOR SEPARATING TRANSMITTED SIGNALS IN A MULTIPLE ANTENNA SYSTEM.

The specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

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No such claim for priority is being made at this time.

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

Application Number

Filing Date

60/536071

January 12, 2004

I hereby claim the benefit under 35 U.S.C. § 120 or 365(c) of any United States and PCT international application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. § 1.56(a) which became available between the filing date of the prior application and the national or PCT international filing date of this application:

No such claim for priority is being made at this time.

I hereby appoint the following attorney(s) and/or patent agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith:

Aldous, Alan	Reg. No. 31,905	Greenberg, Robert A.	Dec No 44 122	Dandalı Maniaus M	D N 10.000
Anderson, Robert D.	Reg. No. 33,826	Greenwald, Bradley A.	Reg. No. 44,133 Reg. No. 34,341	Perdok, Monique M. Peret, Andrew R.	Reg. No. 42,989
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Arora, Suneel	Reg. No. 42,267	Hope, Libby	Reg. No. 46,774	•	Reg. No. 47,857
Bacon, Shireen	Reg. No. 40,494	Huter, Jeffrey B.	Reg. No. 41,086	Plimier, Michael D. Price, Lucinda G.	Reg. No. 43,004
Barre, Michael	Reg. No. 44,023	Jackson Huebsch, Katharine A.	Reg. No. 47,670	•	Reg. No. 42,270
Beale, Jay P.	Reg. No. 50,901	Jordan, B. D.	<u> </u>	Proksch, Michael A.	Reg. No. 43,021
Beekman, Marvin L.	Reg. No. 38,377	Jurkovich, Patti J.	Reg. No. 43,698 Reg. No. 44,813	Prout, William F.	Reg. No. 33,995
Bianchi, Timothy E.	Reg. No. 39,610	Kalis, Janal M.		Reif, Kevin A.	Reg. No. 36,381
Billion, Richard E.	Reg. No. 32,836	Kalson, Seth	Reg. No. 37,650	Sayles, Crystal D.	Reg. No. 44,318
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Bohanek, Bob	Reg. No. 52,627	Klima-Silberg, Catherine I. Kluth, Daniel J.	Reg. No. 40,052	Schwegman, Micheal L.	Reg. No. 25,816
Brake, Edward	Reg. No. 37,784		Reg. No. 32,146	Scott, Russell	Reg. No. 43,103
Brennan, Thomas F.	Reg. No. 35,075	Lacy, Rodney L.	Reg. No. 41,136	Seddon, Ken	Reg. No. 43,105
Burge, Ben	Reg. No. 42,372	Lam, Peter	Reg. No. 44,855	Seeley, Mark	Reg. No. 32,299
Chadwick, Robin A.	,	Lin, Issac	Reg. No. 50,672	Shah, Ami P.	Reg. No. 42,143
Chen, George	Reg. No. 36,477	Lundberg, Steven W.	Reg. No. 30,568	Simon, David	Reg. No. 32,756
Choi, Glen	Reg. No. 50,807	Maki, Peter C.	Reg. No. 42,832	Skabrat, Steve	Reg. No. 36,279
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	Reg. No. 38,107	Martinez, Anthony	Reg. No. 44,223	Steffey, Charles E.	Reg. No. 25,179
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Diehl, Robert	Reg. No. 40,992	Nagy, Paul	Reg. No. 37,896	Wawrzyn, Robert	Reg. No. 54,654
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Faatz, Cindy	Reg. No. 39,973	Nicholls, Dennis A.	Reg. No. 42,036	Winkle, Robert G.	Reg. No. 37,474
Forrest, Bradley A.	Reg. No. 30,837	Nielsen, Walter W.	Reg. No. 25,539	Wisor, Rita	Reg. No. 41,382
Gagne, Christopher	Reg. No. 36,142	Padys, Danny J.	Reg. No. 35,635	Woessner, Warren D.	Reg. No. 30,440
Garrett, John R.	Reg. No. 27,888	Parker, Lanny	Reg. No. 44,281	Wong, Sharon	Reg. No. 37,760
Gorrie, Gregory J	Reg. No. 36,530	Parker, J. K.	Reg. No. 33,024	Yates, Steven D.	Reg. No. 42,242
Greaves, John N.	Reg. No. 40,362	Peacock, Gregg A.	Reg. No. 45,001		<i>y</i> ,
Green, Sharmini N.	Reg. No. 41,410	Pedersen-Giles, Alan	Reg. No. 39,996		

I hereby authorize them to act and rely on instructions from and communicate directly with the person/assignee/attorney/firm/organization/who/which first sends/sent this case to them and by whom/which I hereby declare that I have consented after full disclosure to be represented unless/until I instruct Schwegman, Lundberg, Woessner & Kluth, P.A. to the contrary.

Please direct all correspondence in this case to Schwegman, Lundberg, Woessner & Kluth, P.A. at the address indicated below:

P.O. Box 2938, Minneapolis, MN 55402

Telephone No. (612)373-6900

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

, J		and appropriation of any pare	in issued thereon:	
Full Name of joint inventor n	umber 1:	Sumeet Sandhu		
Citizenship:	United	States of America	Residence: San Jose, CA	

Post Office Address:

25 Rio Robles East

#408

San Jose, CA 95134

Signature:		Date:
Sum	eet Sandhu	

Attorney Docket No.: 884.B51US1 Serial No. not assigned Filing Date: not assigned

Page 3 of 5

X Additional inventors are being named on separately numbered sheets, attached hereto.

Attorney Docket No.: 884.B51US1 Serial No. not assigned Filing Date: not assigned

Full Name of joint invent	or number 2 : <u>Lei Shao</u>	
Citizenship:	China	Residence: Seattle, WA
Post Office Address:	5038 18th Ave. NE	
Signature:	Seattle, WA 98105 Lei Shao	Date: 03/29/2004

Attorney Docket No.: 884.B51US1 Serial No. not assigned Filing Date: not assigned

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 - (1) Each inventor named in the application:
 - (2) Each attorney or agent who prepares or prosecutes the application; and
 - (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.
- (d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.